

FIG. 1A

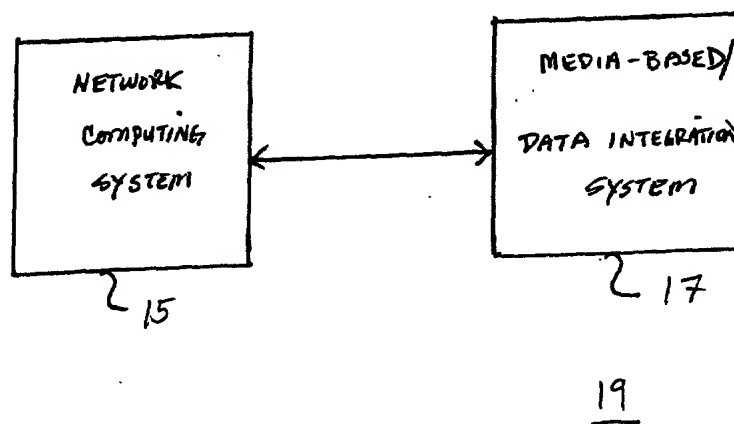


FIG. 1B

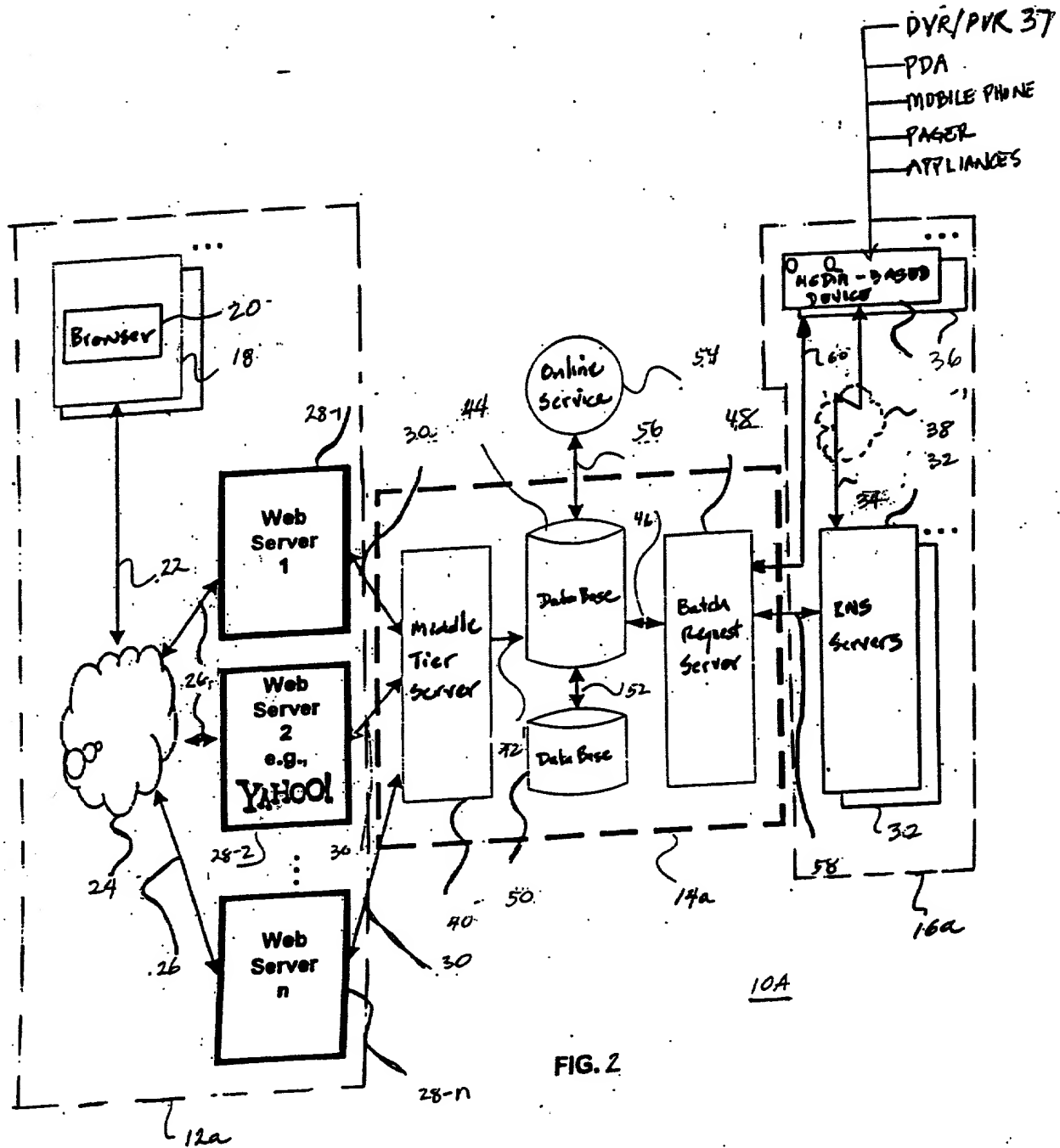
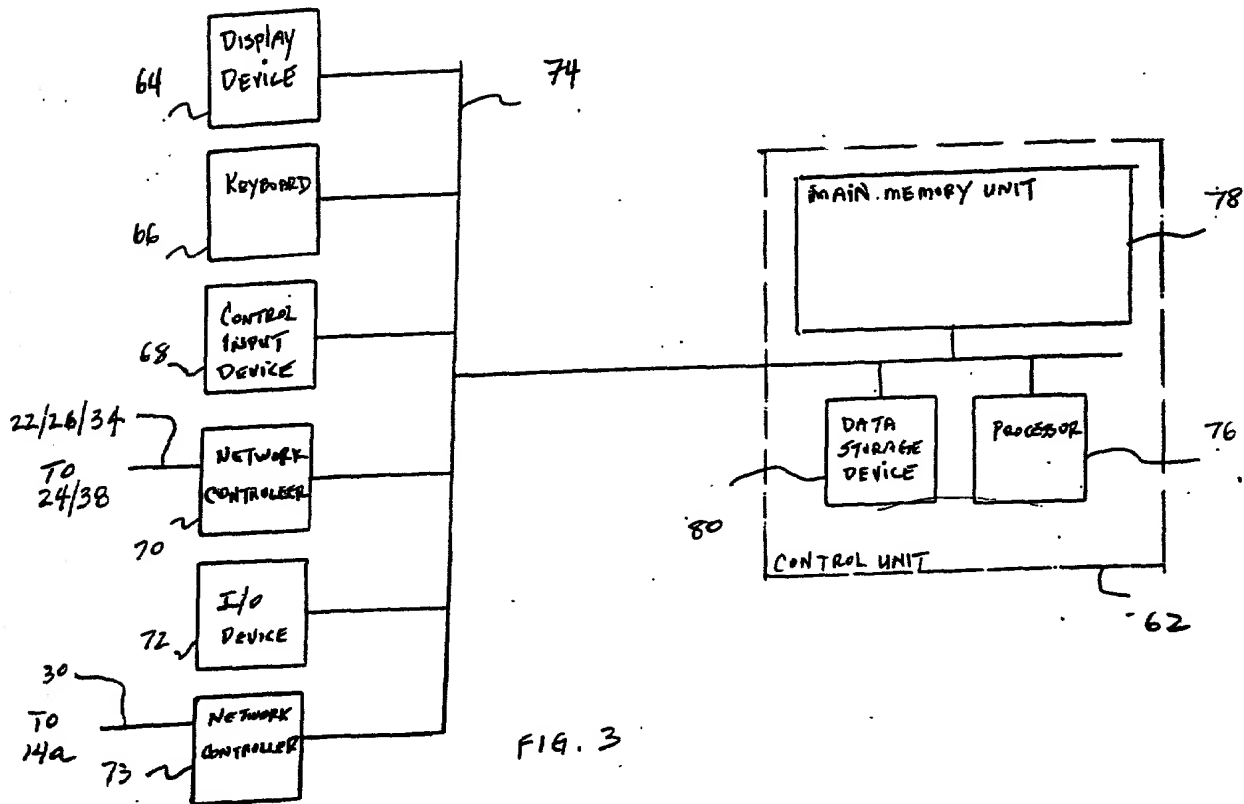


FIG. 2

18/28/40/32/48/36



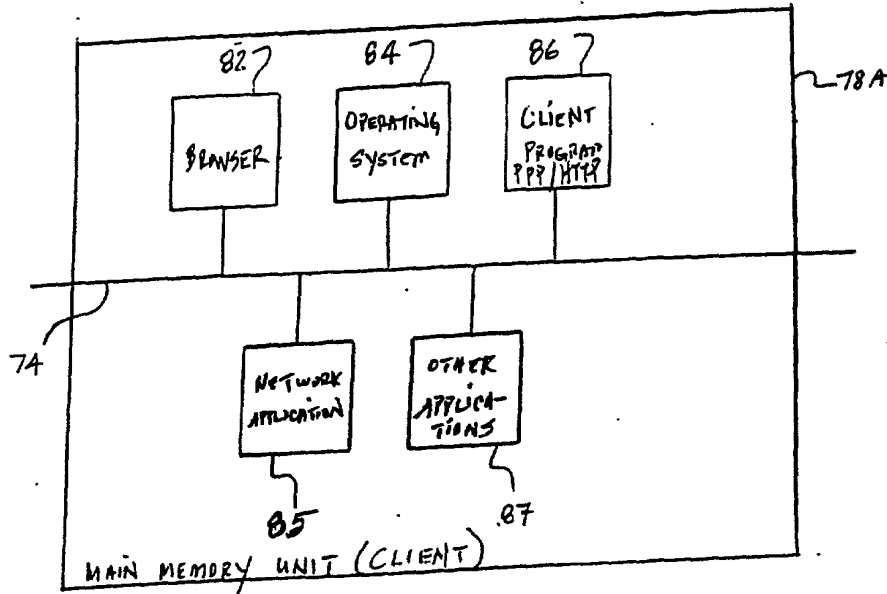


FIG. 4A

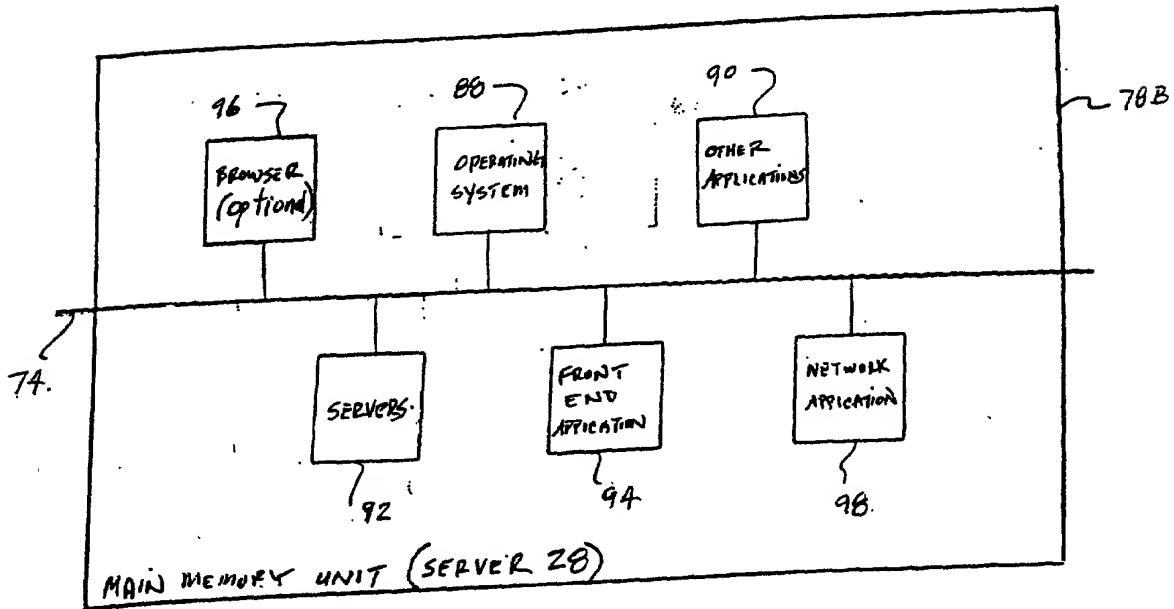


FIG. 4B

FIG. 4A

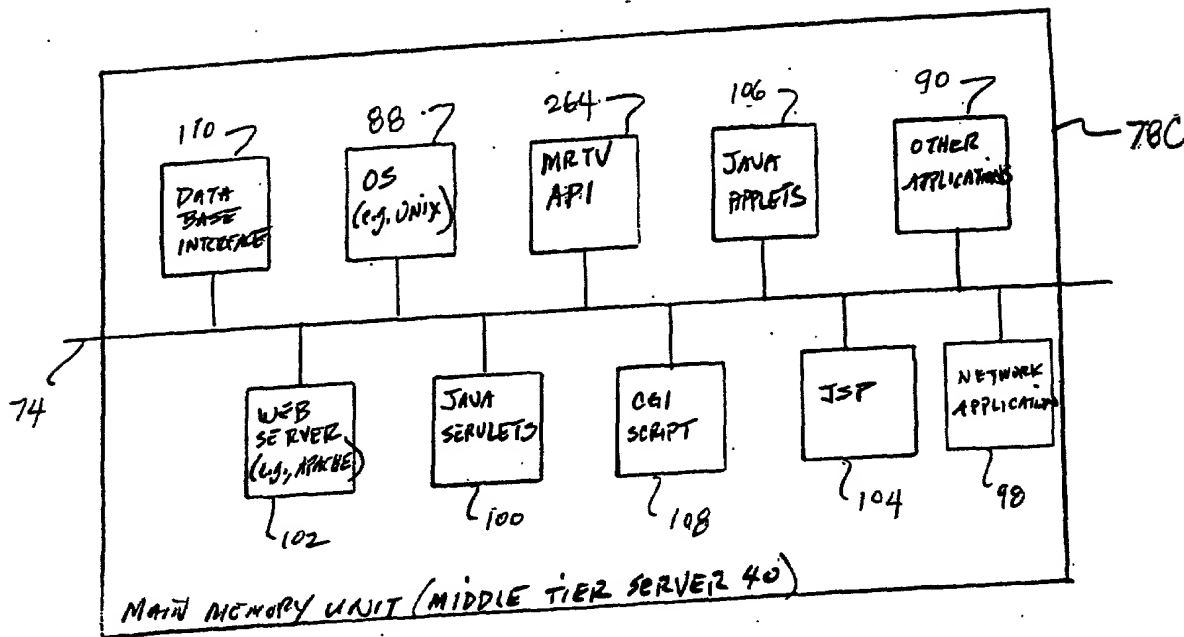


FIG. 4C

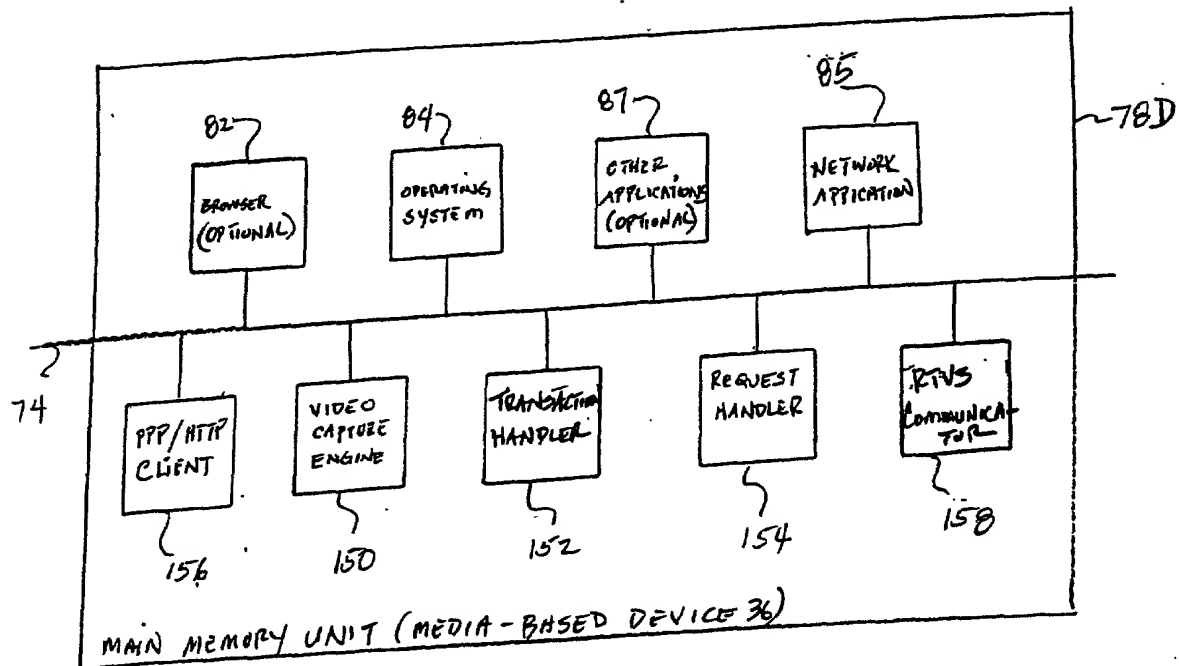


FIG. 4D

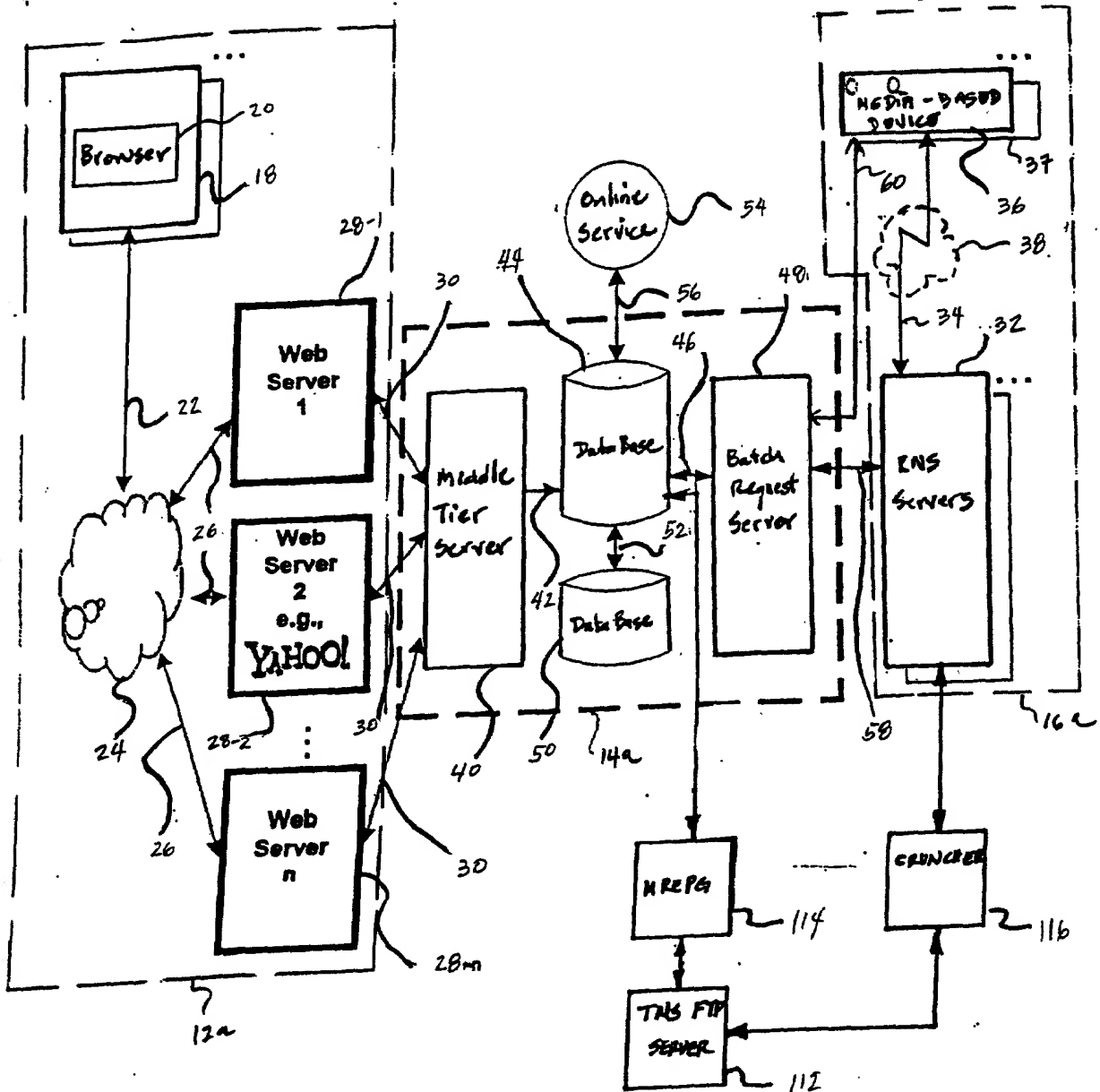


FIG. 5

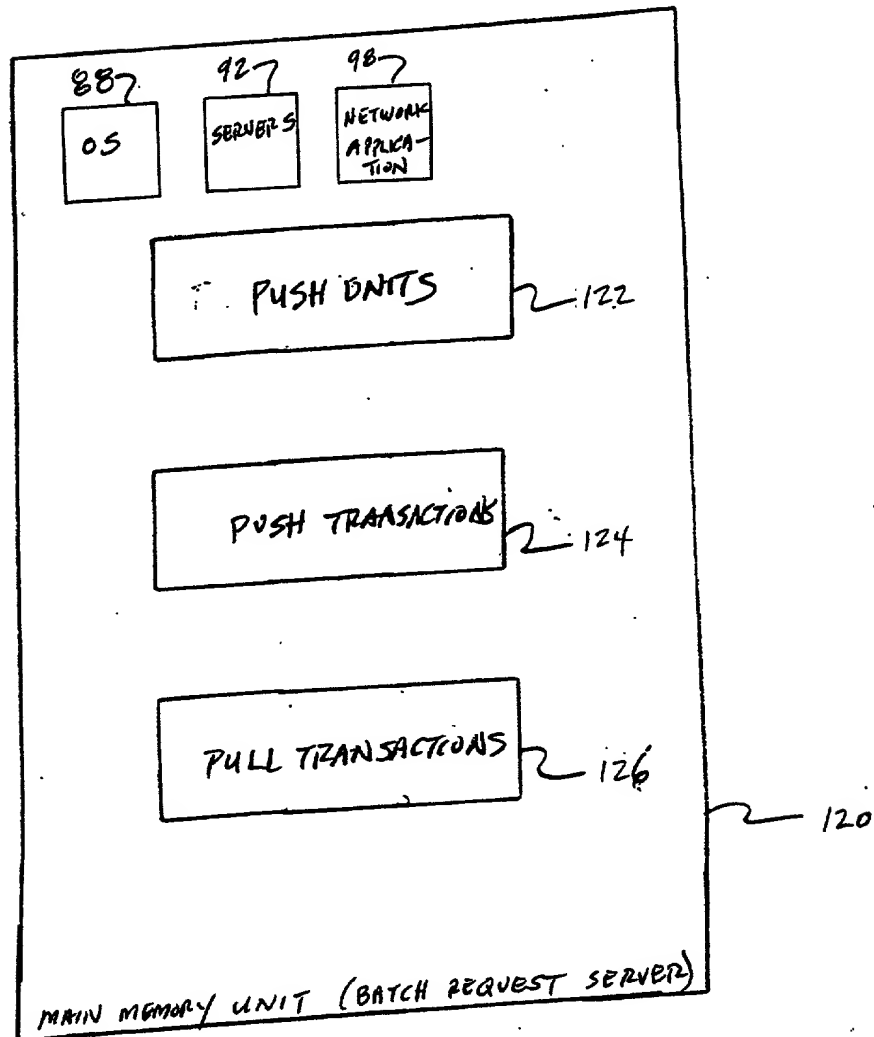


FIG. 6

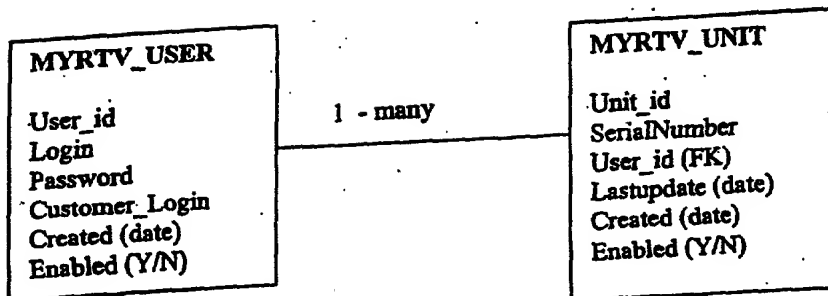


FIG. 7

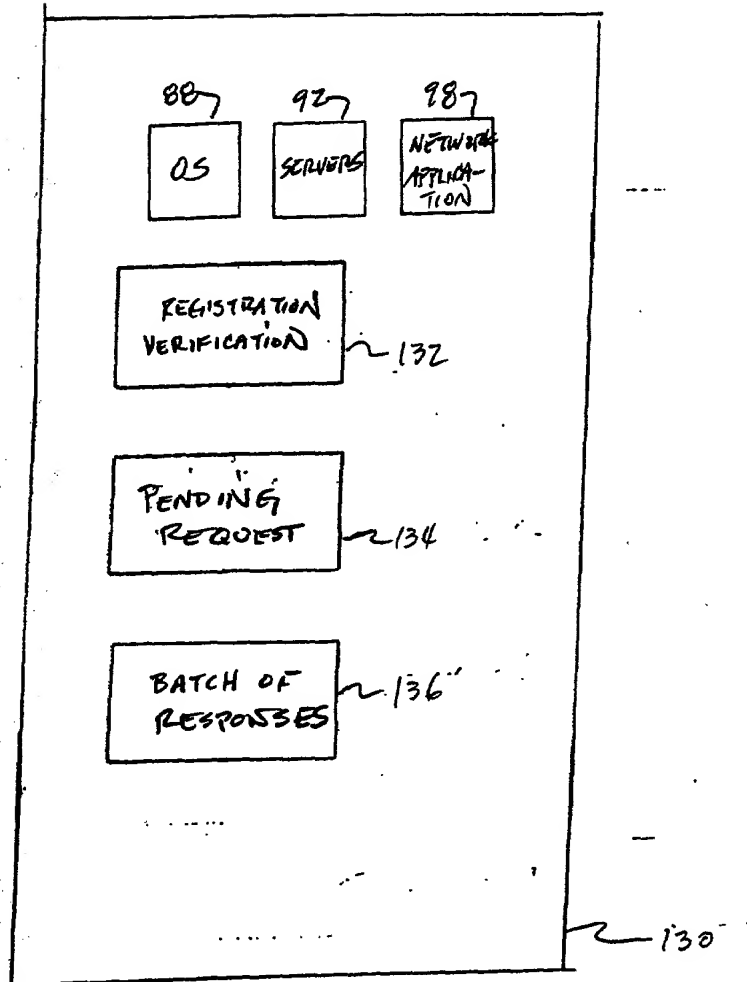


FIG. 8

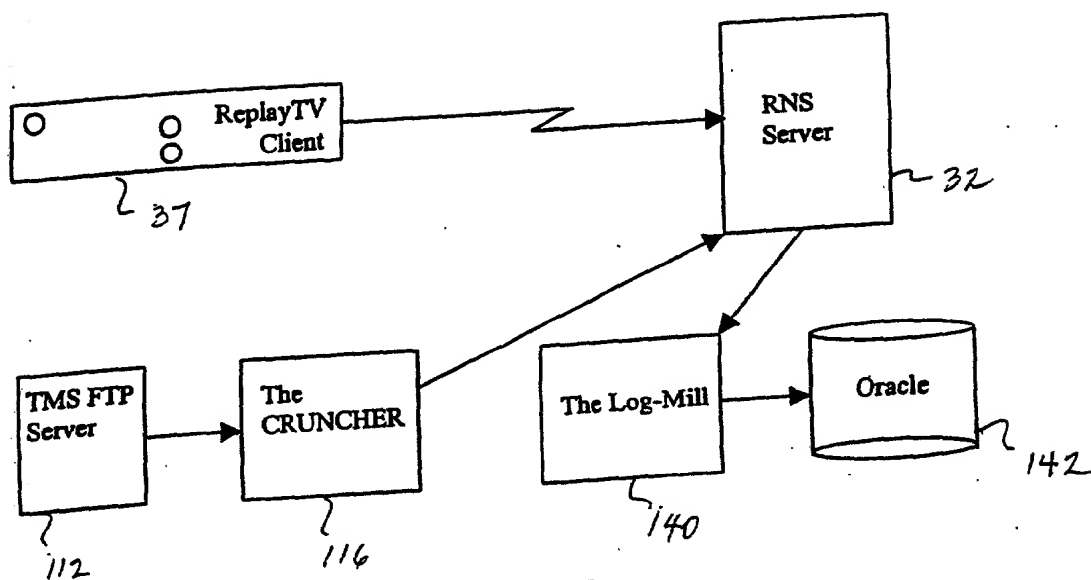


FIG. 9

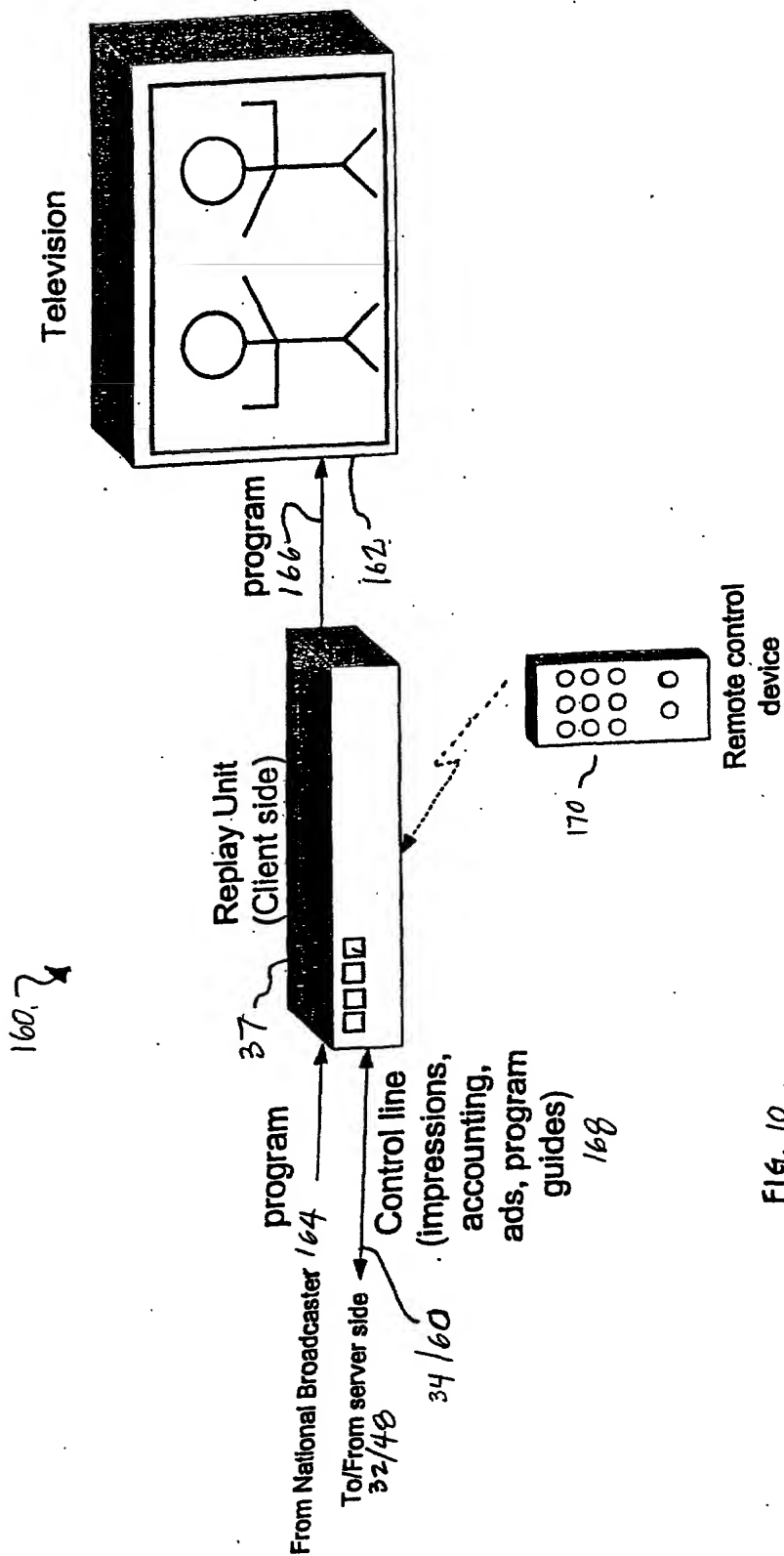


FIG. 10

The diagram shows a rectangular frame representing a web page. In the top left, the text 'my(r) replaytv' is displayed, with the 'r' inside a circle. Below this is the text 'marketing/promotional information'. On the right side, there is a login section. It includes a 'user name:' label followed by a rectangular input field, and a 'password:' label followed by another rectangular input field. To the right of the password field is a 'login' button. Below the password field are two links: 'remember my password' (preceded by a checkbox) and 'I forgot my password'. Below these links is a question 'Are you a new user to the myreplaytv website?' followed by a 'register' button. At the bottom left of the page are two links: 'help' and 'contact us'. Handwritten annotations include '182' pointing to the login button, '184' pointing to the password input field, and '180' at the bottom right of the frame.

my(r) replaytv[®]
marketing/promotional information

user name:

password:

☐ remember my password [I forgot my password](#)

Are you a new user to the myreplaytv website?

[help](#) [contact us](#)

182

184

180

FIG. 11

708080 1215000

my ReplayTV

Channel Guide

Channel Guide

Replay Guide

Thu Shows

Manual Record

Preferences

Help

Logout

Tue 3/06

195 197 194 192

Today 03/06

6 pm

GO

192

190

204

206

208

0 OXYGEN	An Officer and a Gentleman	6:00 PM	6:30 PM	7:00 PM	7:30 PM
1 IN1	Me, Myself & Irene				
2 KTVU	6 O'Clock Ne...				
3 LOOR003	Local Origination				
4 KRON	NewsCenter 4 at 6				
5 KPIX	CBS News				
6 KICU	Home Improve...				
7 KGO	ABC 7 News at 6PM				
8 KTSF	TV Patrol				
9 KQED	Zoboomafoo				
10 KTEH	BBC World Ne...				
11 TVGOS	TV Guide				
12 KBHK	The Simpsons				
13 KBWB	The Drew Car...				
14 KDTV	Noticias 14				
	An Officer and a Gentleman				
	Me, Myself & Irene				
	6 O'Clock Ne...				
	Local Origination				
	NewsCenter 4 at 6				
	CBS News				
	Home Improve...				
	ABC 7 News at 6PM				
	TV Patrol				
	Zoboomafoo				
	BBC World Ne...				
	TV Guide				
	The Simpsons				
	The Drew Car...				
	Noticias 14				
	An Officer and a Gentleman				
	Me, Myself & Irene				
	6 O'Clock Ne...				
	Local Origination				
	NewsCenter 4 at 6				
	CBS News				
	Home Improve...				
	ABC 7 News at 6PM				
	TV Patrol				
	Zoboomafoo				
	BBC World Ne...				
	TV Guide				
	The Simpsons				
	The Drew Car...				
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	CBS News				
	Home Improve...				
	ABC 7 News at 6PM				
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	Home Improve...				
	ABC 7 News at 6PM				
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	CBS News				
	Home Improve...				
	ABC 7 News at 6PM				
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	Zoboomafoo				
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	The Simpsons				
	The Drew Car...				
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	Me, Myself & Irene				
	6 O'Clock Ne...				
	Local Origination				
	NewsCenter 4 at 6				
	CBS News				
	Home Improve...				
	ABC 7 News at 6PM				
	TV Patrol				
	Zoboomafoo				
	BBC World Ne...				
	TV Guide				
	The Simpsons				
	The Drew Car...				
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	Me, Myself & Irene				
	6 O'Clock Ne...				
	Local Origination				
	NewsCenter 4 at 6				
	CBS News				
	Home Improve...				
	ABC 7 News at 6PM				
	TV Patrol				
	Zoboomafoo				
	BBC World Ne...				
	TV Guide				
	The Simpsons				
	The Drew Car...				
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	6 O'Clock Ne...				
	Local Origination				
	NewsCenter 4 at 6				
	CBS News				
	Home Improve...				
	ABC 7 News at 6PM				
	TV Patrol				
	Zoboomafoo				
	BBC World Ne...				
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	The Simpsons				
	The Drew Car...				
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	NewsCenter 4 at 6				
	CBS News				
	Home Improve...				
	ABC 7 News at 6PM				
	TV Patrol				
	Zoboomafoo				
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	NewsCenter 4 at 6				
	CBS News				
	Home Improve...				
	ABC 7 News at 6PM				
	TV Patrol				
	Zoboomafoo				
	BBC World Ne...				
	TV Guide				
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	NewsCenter 4 at 6				
	CBS News				
	Home Improve...				
	ABC 7 News at 6PM				
	TV Patrol				
	Zoboomafoo				
	BBC World Ne...				
	TV Guide				
	The Simpsons				
	The Drew Car...				
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	An Officer and a Gentleman				
	Me, Myself & Irene				
	6 O'Clock Ne...				
	Local Origination				
	NewsCenter 4 at 6				
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	TV Patrol				
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	Home Improve...				
	ABC 7 News at 6PM				
	TV Patrol				
	Zoboomafoo				
	BBC World Ne...				
	TV Guide				
	The Simpsons				
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	Zoboomafoo				
	BBC World Ne...				
	TV Guide				
	The Simpsons				
	The Drew Car...				
	Noticias 14				
	An Officer and a Gentleman				
	Me, Myself & Irene				
	6 O'Clock Ne...				

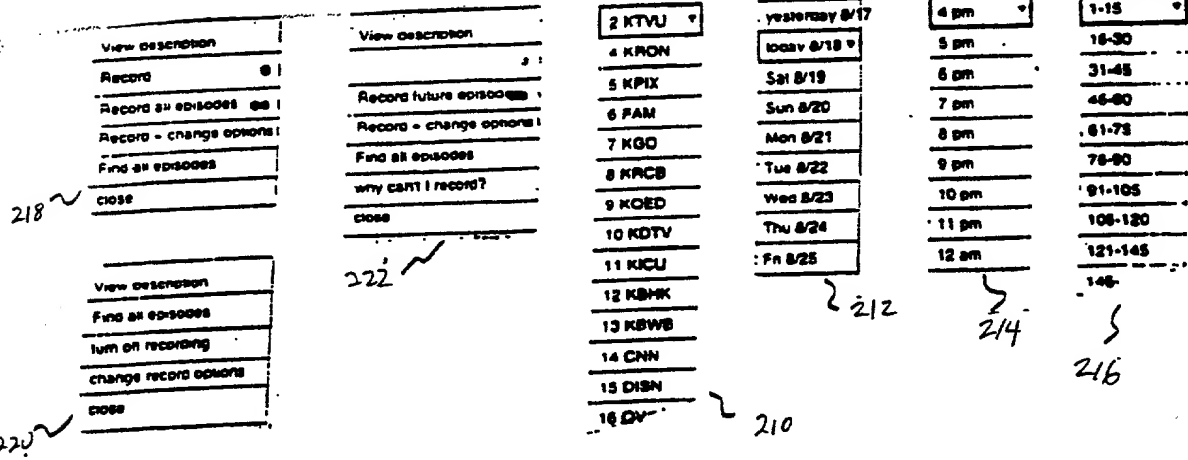


FIG. 12B

0995424 000001

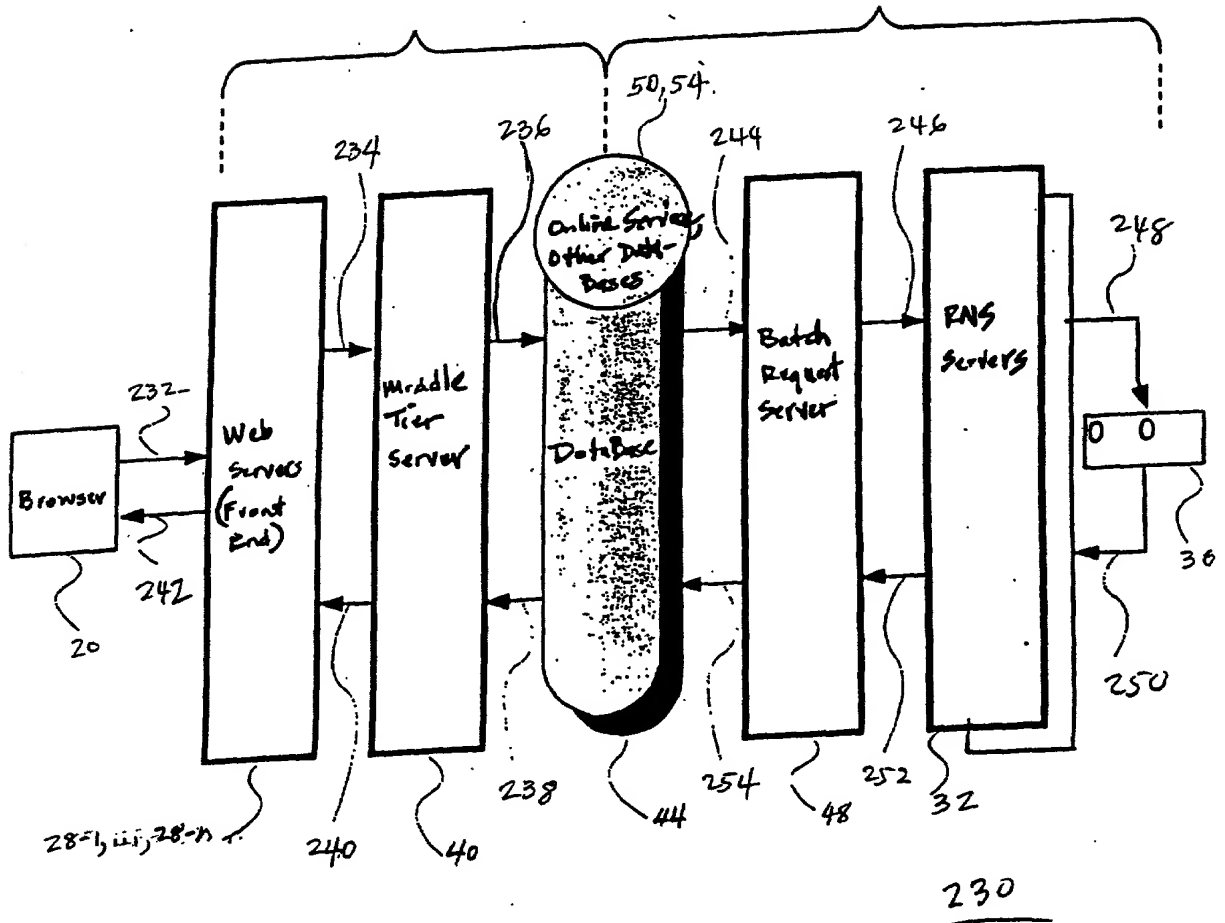


FIG. 13A

SEQUENCE DIAGRAM

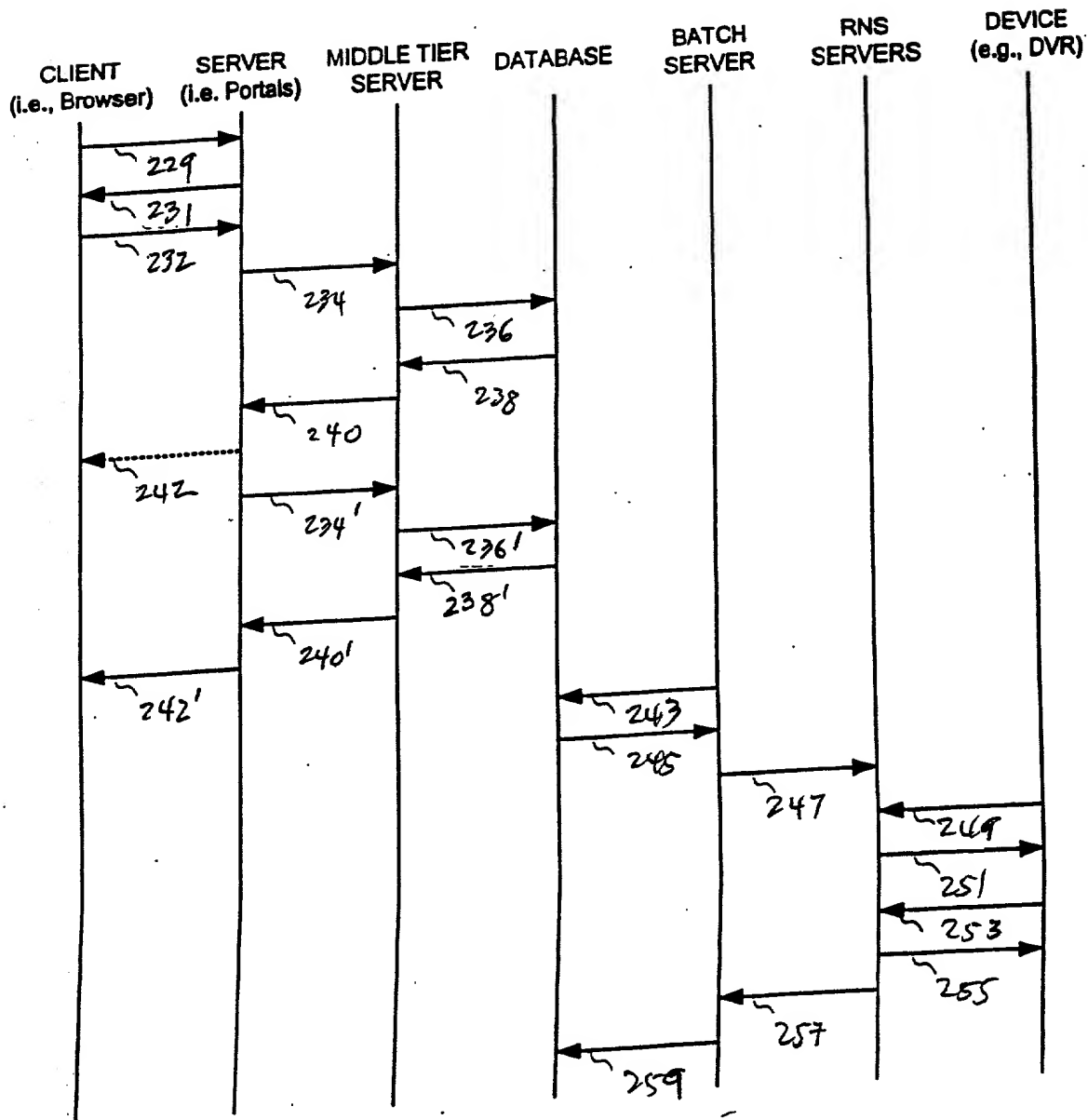


FIG. 13B

API Routine	Function
CreateAccount	Creates an account for a new user based on the information received
Login	Tries to authenticate a user based on the input username and password combination
GetProfile	Returns the profile of the user and his units based on his userid
AddRequest	Adds a request to the unit's list of pending requests based on a set of request parameters, and returns the full status of the unit and of the pending requests, including those for recording specified show(s) and deleting recorded show(s)
DeleteRequest	Delete a request from the user list of pending requests
GetReplayGuide	Returns the Replay Guide of the unit as saved in the appropriate database for the specified unit
GetChannelLineUp	Returns the channel lineup of the unit based on the unit's settings
ChangePassword	Lets the user changes his password
GetEPG	Returns the current electronic program guide for the unit based on the settings of the unit
ShowGuide	Returns detailed information about a specified show or search show details for particular shows based on criteria given as parameters

FIG. 14

API Routine	Input Parameters	Output Files (Corresponding XML elements)
CreateAccount	firstname, lastname, address1, address2, city, state, zipcode, serialnumber, login, password, creator	ACCOUNT.XML REPLAYERROR.XML
Login	login, password	ACCOUNT.XML REPLAYERROR.XML
GetProfile	userid	PROFILE.XML (USERINFO, UNITINFO-I) REPLAYERROR.XML
AddRequest	userid, unitid, reqtype(none, show, theme, update) reqtype=show: showtype(single, repeat, manual single, manual repeat), headendid, tmsid, device, starttimegmt, name, durationinminutes, inputsource, quality, guaranteedrecord, numepisodes, weekdayflags, earlieststartminutes, showguaminutes reqtype=theme: searchterm, searchflags, suzukid, durationinminutes, quality, guaranteedrecord reqtype=update: updatetype(deleteshow, preservershow, deletechannel), channelid, showid	UNITSTATUS.XML (UNITINFO, REQUESTSTATUS-I) REPLAYERROR.XML *Note: REQUESTSTATUS Result=(PENDING, SENT, SUCCESS, GENERAL FAILURE, SCHEDULEFAILURE, ROOMFAILURE)
DeleteRequest	userid, unitid, requestid	DELETERESULT.XML REPLAYERROR.XML
GetReplayGuide	userid, unitid	GUIDE.XML (REPLAYCHANNEL-I) REPLAYERROR.XML *Note: REPLAYCHANNEL Type=(SINGLE, SINGELMANUAL, REPEAT, REPEATMANUAL, THEME, THEMEEXACT, ZONE)
GetChannelLineUp	userid, unitid	CHANNELLINEUP.XML (CHANNEL-I) REPLAYERROR.XML
ChangePassword	userid, currentpassword, newpassword	ACCOUNT.XML REPLAYERROR.XML
GetEPG	userid, unitid, starttimegmt, durationinminutes, startchannel, channelcount	XML file based on tvguide.dtd & tvprograms.dtd REPLAYERROR.XML
ShowGuide	userid, unitid, query, start, count, levelofdetail *Note: query keywords include actor, advisory, desc, impairing, title, etc.	XML file based on tvguide.dtd & tvprograms.dtd REPLAYERROR.XML

FIG. 15

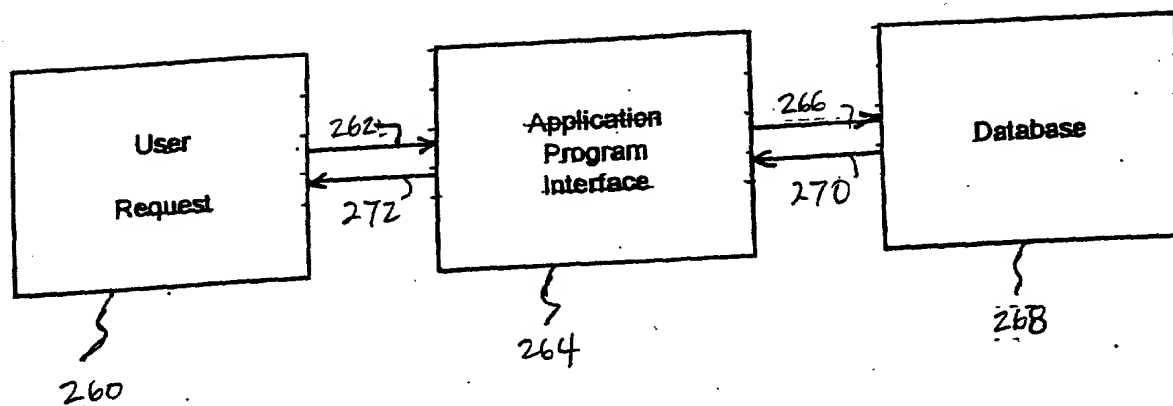


FIG. 16A

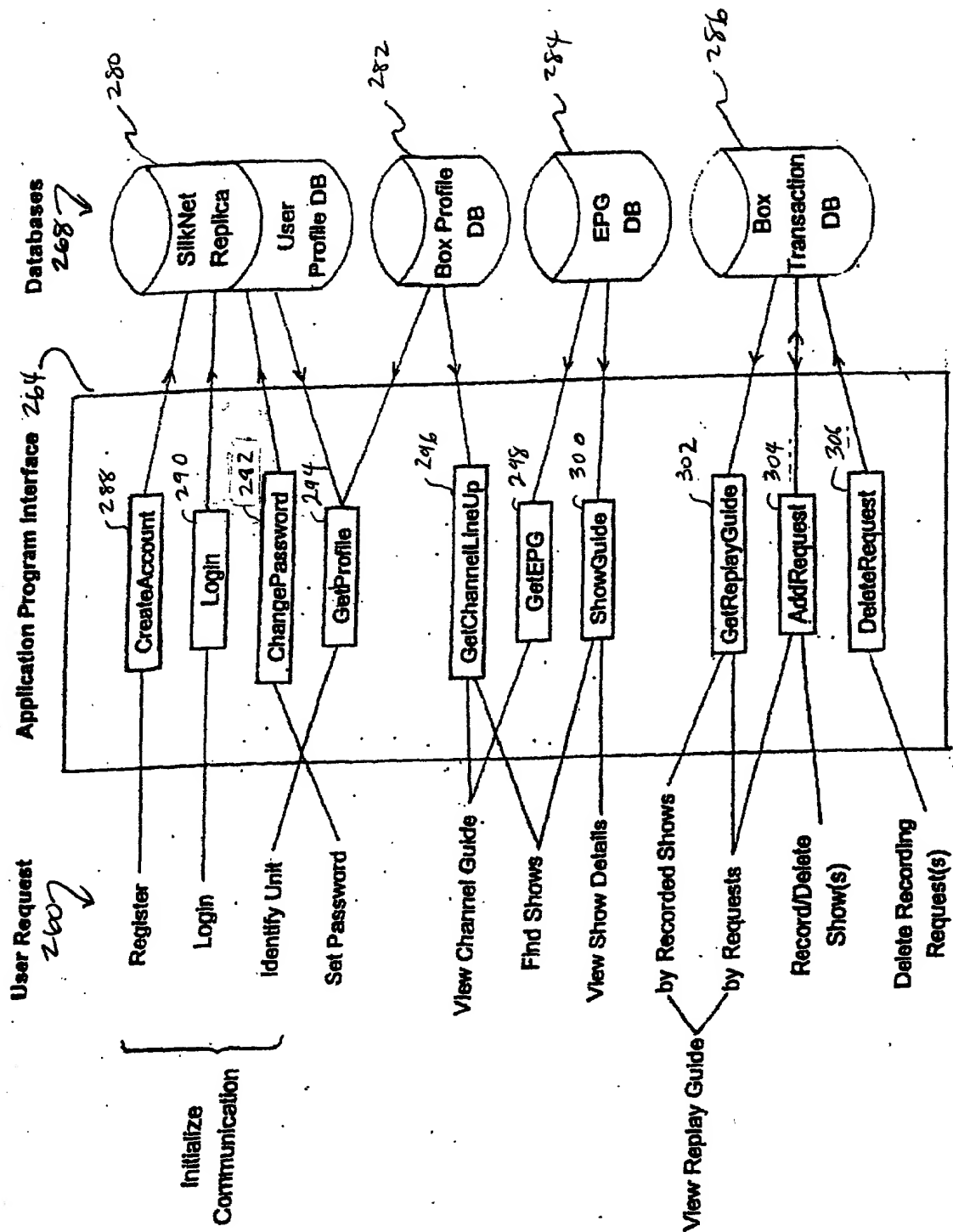


FIG. 16B

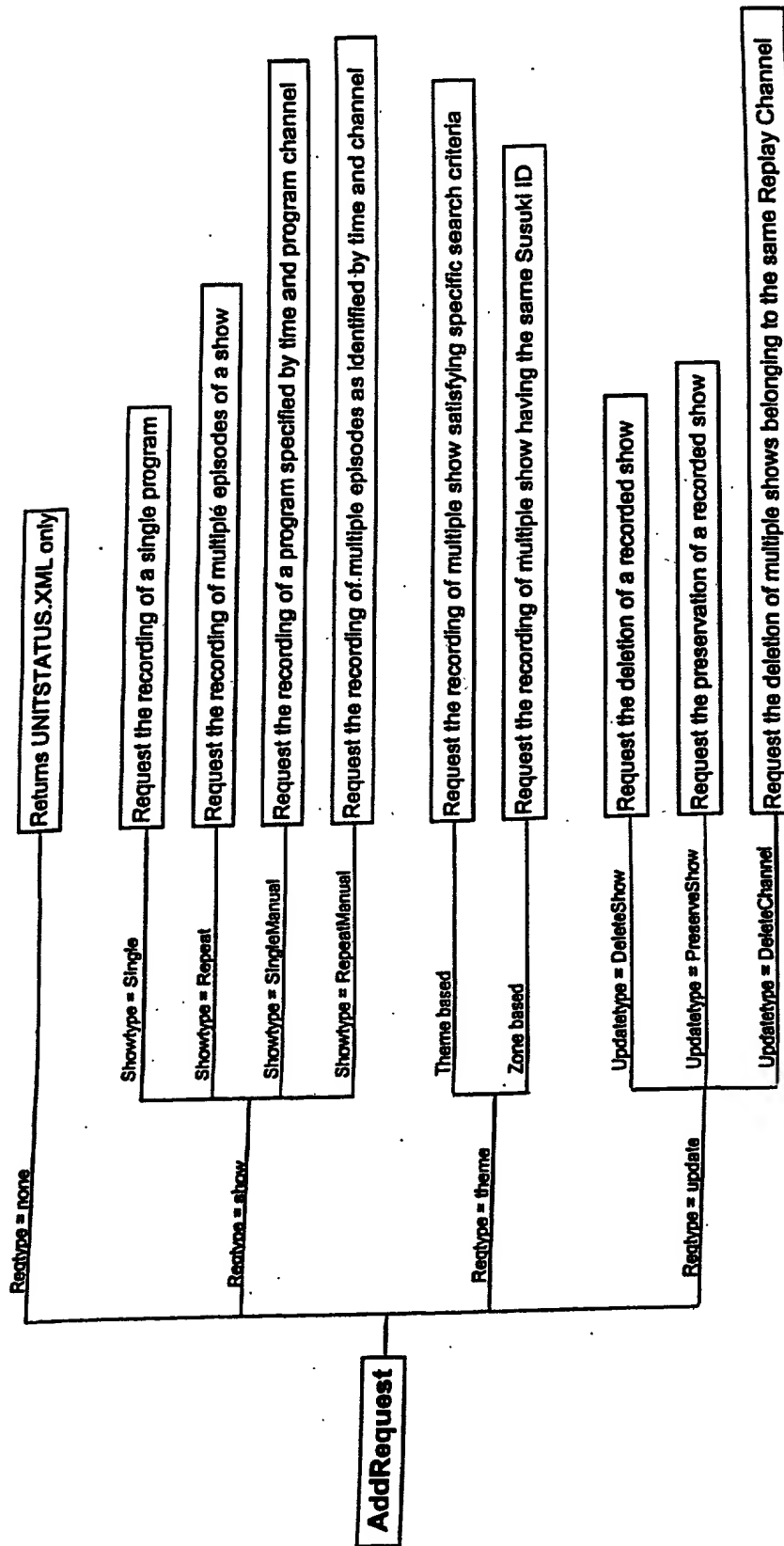


FIG. 17

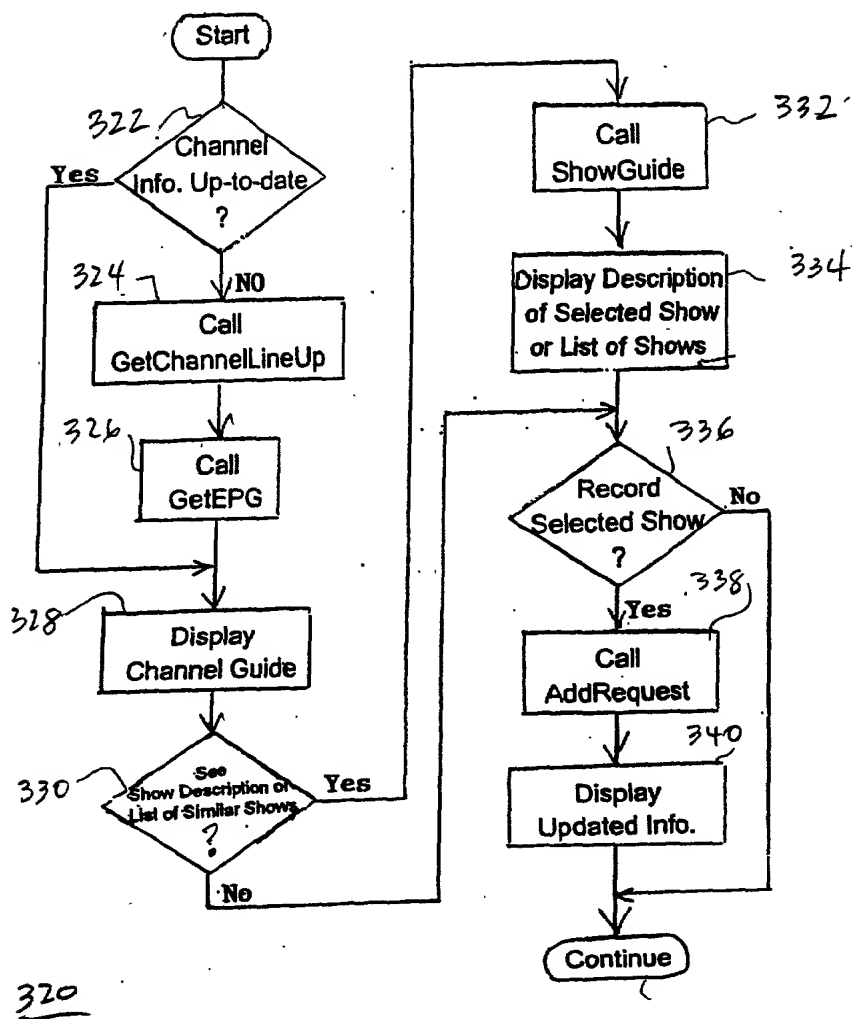


FIG. 18

FIG. 19A

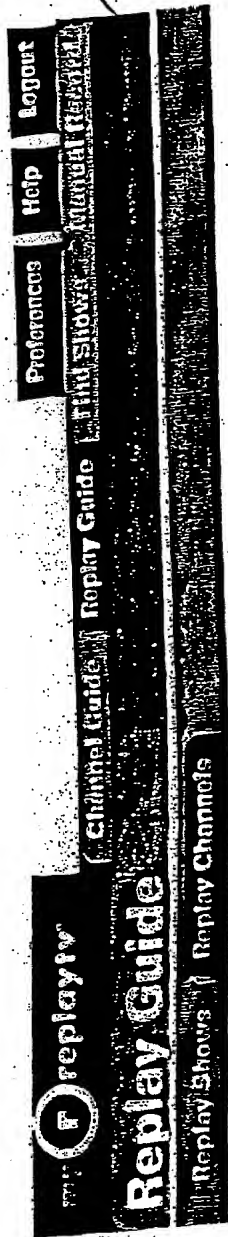


FIG. 19A: A screenshot of a 'Replay Guide' web application interface.

FIG. 19A: A screenshot of a 'Replay Guide' web application interface.

Channel	Details	Status	Request Date
<input type="checkbox"/> A Fistful of Dollars	This single record Replay channel was scheduled to record A Fistful of Dollars from Channel 21(TBS) on Sun, 02/18 at or around 7:00AM - 9:00AM. Guaranteed at EXTENDED quality. Nothing else is scheduled to record.		02/18
<input type="checkbox"/> Blown Away	This single record Replay channel was scheduled to record Blown Away from Channel 42(USAP) on Tue, 01/16 at or around 9:00PM - 11:30PM. Guaranteed at EXTENDED quality. Nothing else is scheduled to record.		01/16
<input type="checkbox"/> Cantonese News	This show-based Replay channel will continuously record the 1 most current episode(s) of Cantonese News occurring every (Sun, Mon, Tue, Wed, Thu, Fri, Sat) on Channel 8(KTSF) at or around 8:00PM - 9:00PM. Guaranteed at EXTENDED quality.		02/28
<input type="checkbox"/> Captain January	This single record Replay channel was scheduled to record Captain January from Channel 49(AMC) on Tue, 01/09 at or around 3:30AM - 5:00AM. Guaranteed at EXTENDED quality. Nothing else is scheduled to record.		01/09

FIG. 19A



Find Shows (and other related shows) to your display with



Channel	Show Title/Episode	Date/Time	Station	Duration	Size
<input type="checkbox"/>	A Fistful of Dollars	02/18 7:00AM	21 TBS	(2h)	6.46%
<input type="checkbox"/>	Blown Away	01/16 9:00PM	42 USAP	(2h 30m)	8.07%
<input type="checkbox"/>	Captain January	01/09 3:30AM	49 AMC	(1h 30m)	4.84%
<input type="checkbox"/>	Firewalker	02/27 8:00PM	21 TBS	(2h)	6.46%
<input type="checkbox"/>	On Deadly Ground	01/07 9:00PM	4 KRON	(2h)	6.46%
<input type="checkbox"/>	Platoon	02/04 8:00PM	37 TNT	(2h 30m)	8.07%
<input type="checkbox"/>	The Bridge on the River Kwai	12/24 8:00AM	42 USAP	(3h 30m)	11.30%
<input type="checkbox"/>	The Little Princess	12/26 4:15AM	49 AMC	(1h 45m)	5.65%
<input type="checkbox"/>	The Trouble With Harry	12/18 1:05PM	49 AMC	(1h 55m)	6.19%
<input type="checkbox"/>	Welcome to ReplayTV	09/08 10:49AM		(15m)	2.42%

FIG. 19B

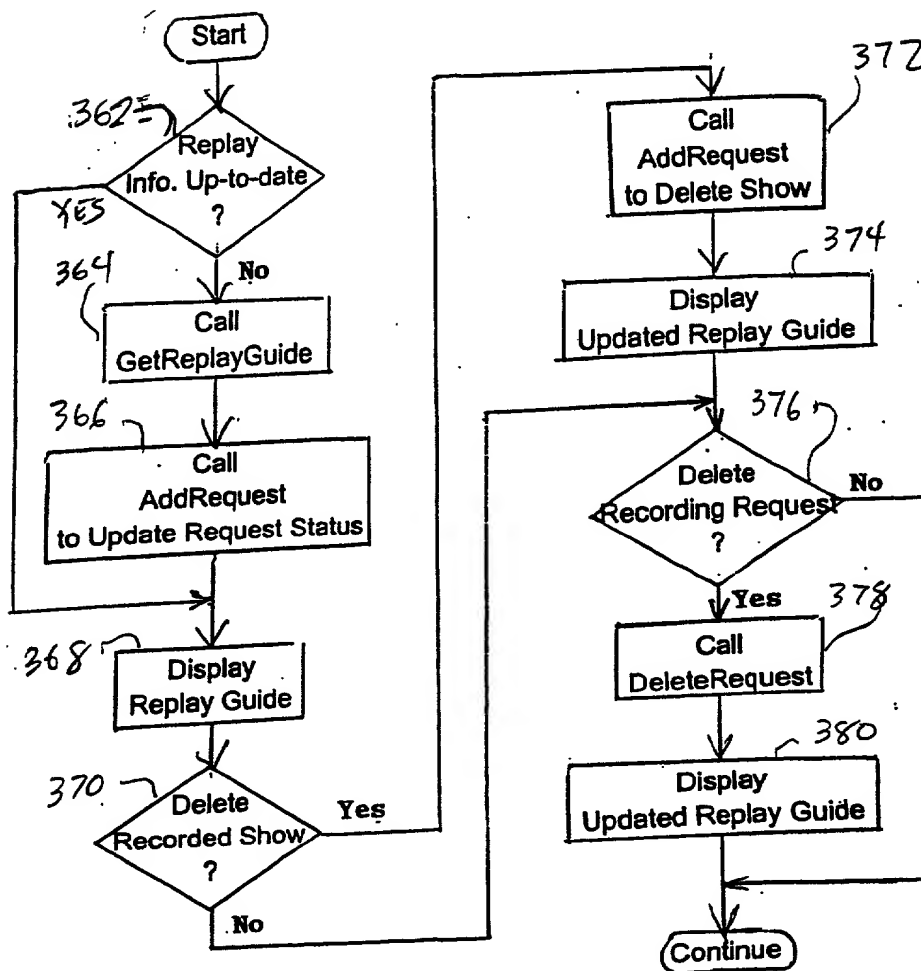


FIG. 20

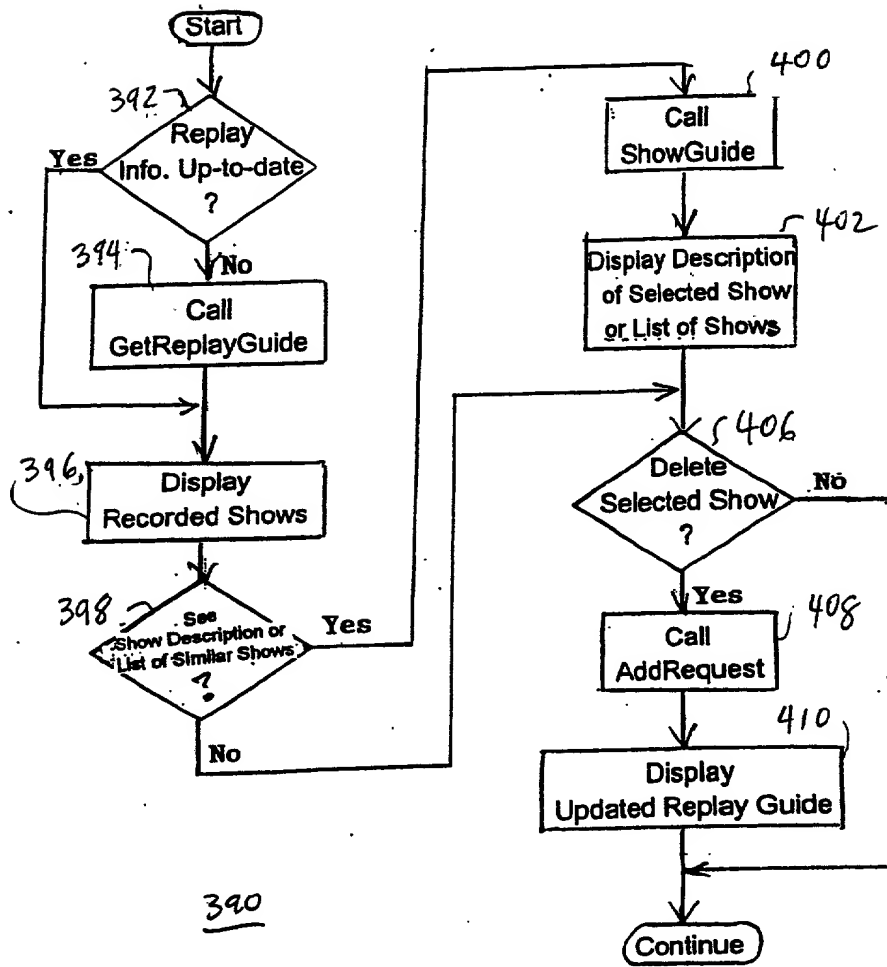


FIG. 21

FIG. 22



Find:

Enter the word or phrase that you
wish to find.

In these categories:

- ☒ Show Titles ☐ Actors
☒ Descriptions ☐ Directors



Copyright Policy | Terms And Conditions | Privacy Policy | FAQ

FIG. 22

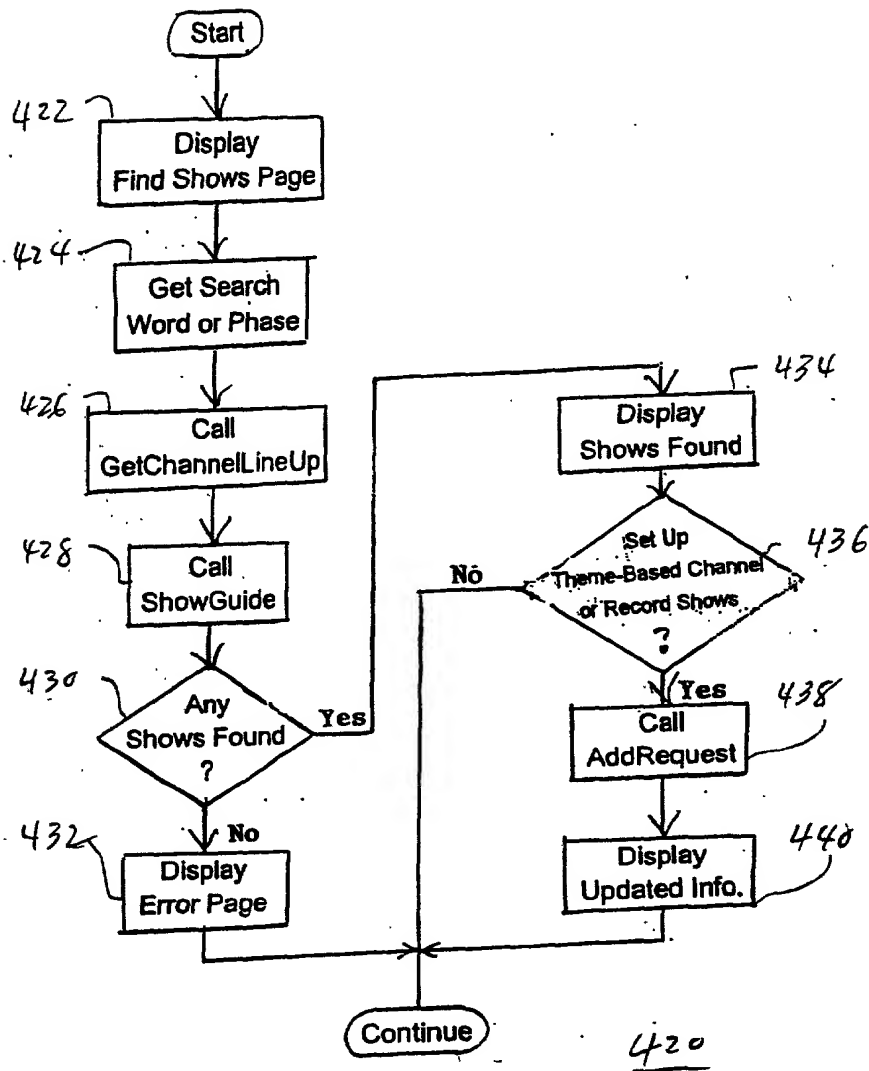


FIG. 23

FIG. 24A

my replaytv

Channel GuideReplay GuideFind ShowsManual Record

PreferencesHelpLogout

Manual Record

Single RecordingRepeat Recording

Start DateMar72001

Start Time:AM

End Time:AM


Channel10 OXYGEN

QualityExtended

GuaranteedYes

Recording duration:

Submit Request

my  replaytv

Channel Guide Find Shows Manual Record Replay Guide

preferences
help
logout

Manual Record

3h 45m available at medium quality
as of last connection

Single Recording Repeat Recording


Days ☐ Mon ☒ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat ☐ Sun

Start Time 7 : 58 PM ▼ End Time 11 : 02 PM ▼

Channel 4 KRON ▼

Quality Standard ▼

Guaranteed Yes ▼



452

FIG. 24B

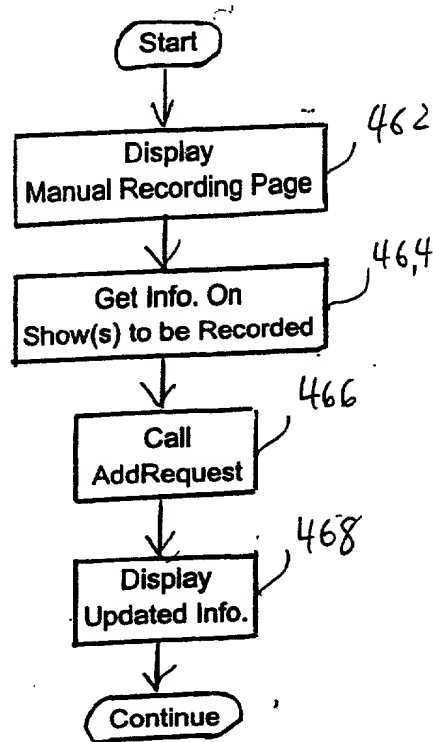


FIG. 25

0925434 030304

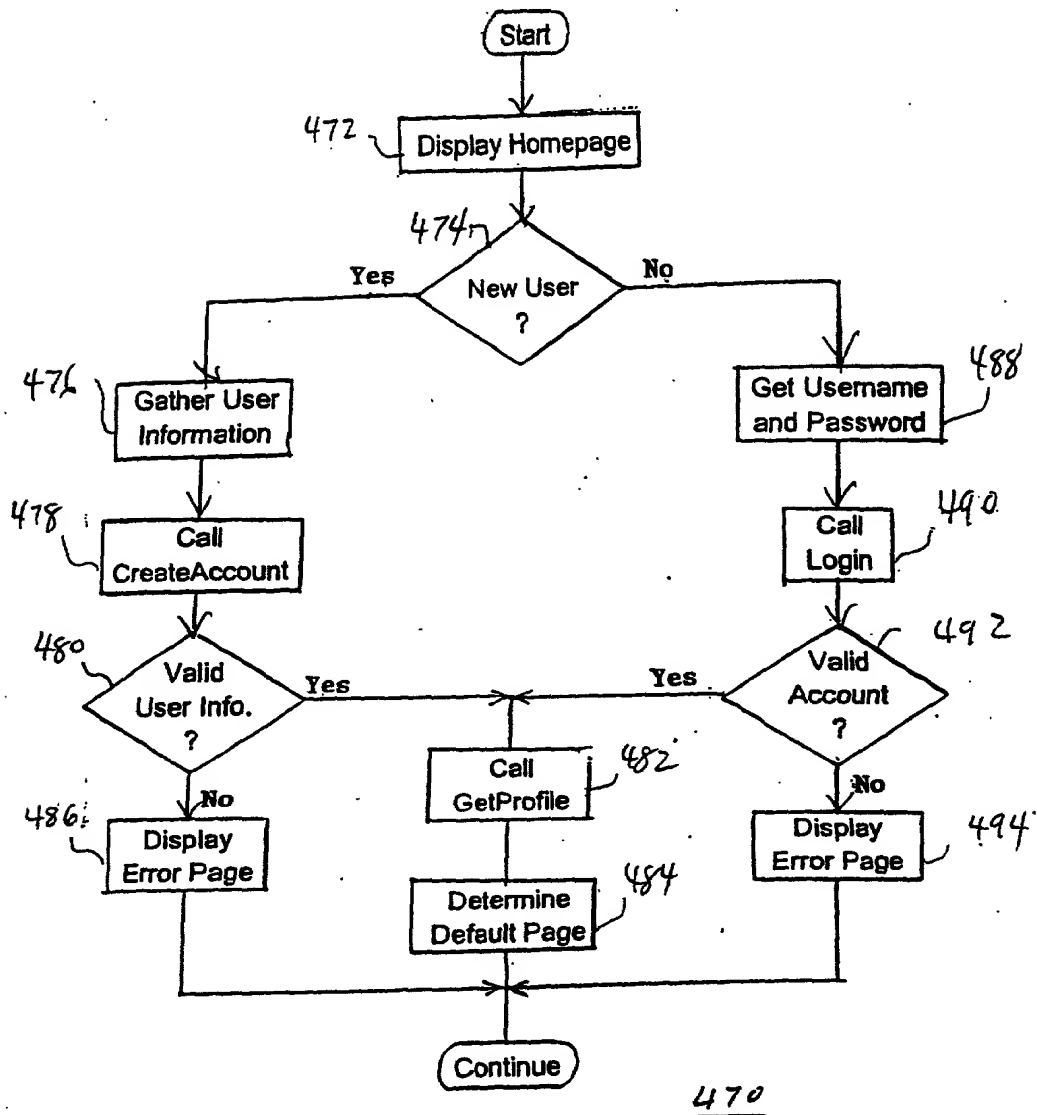


FIG. 26

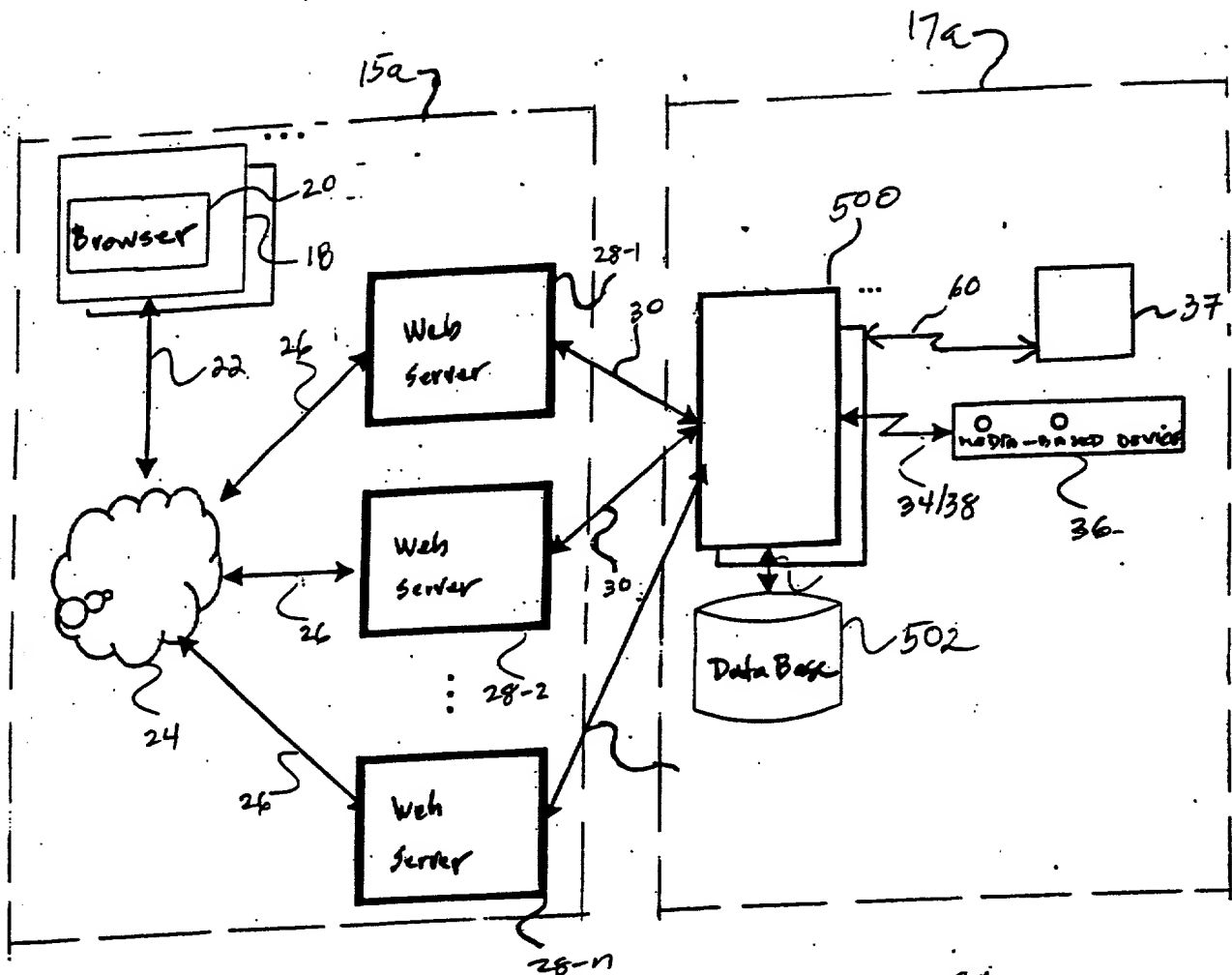


FIG. 27

095414-00001

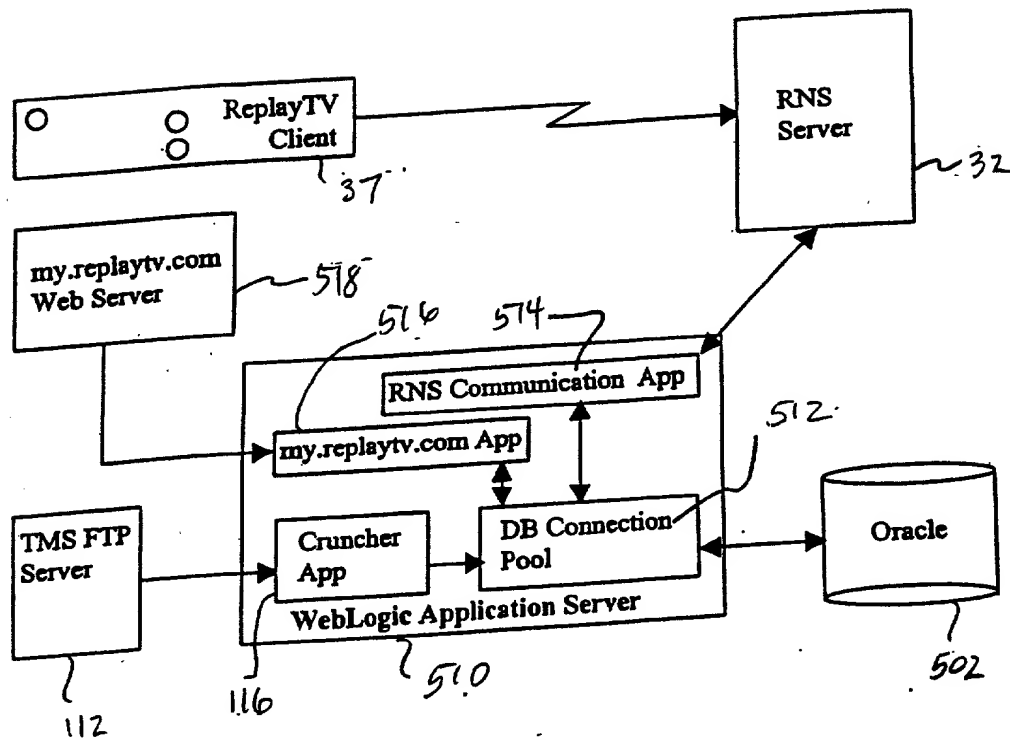


FIG. 28

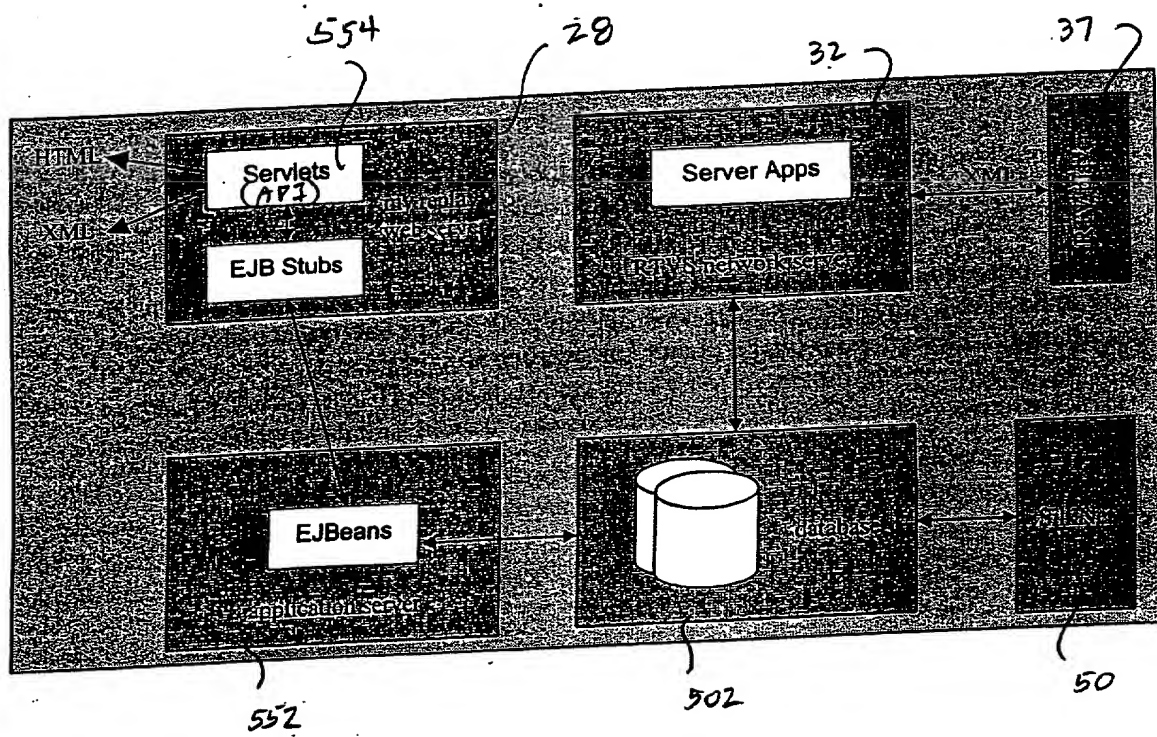


FIG. 29

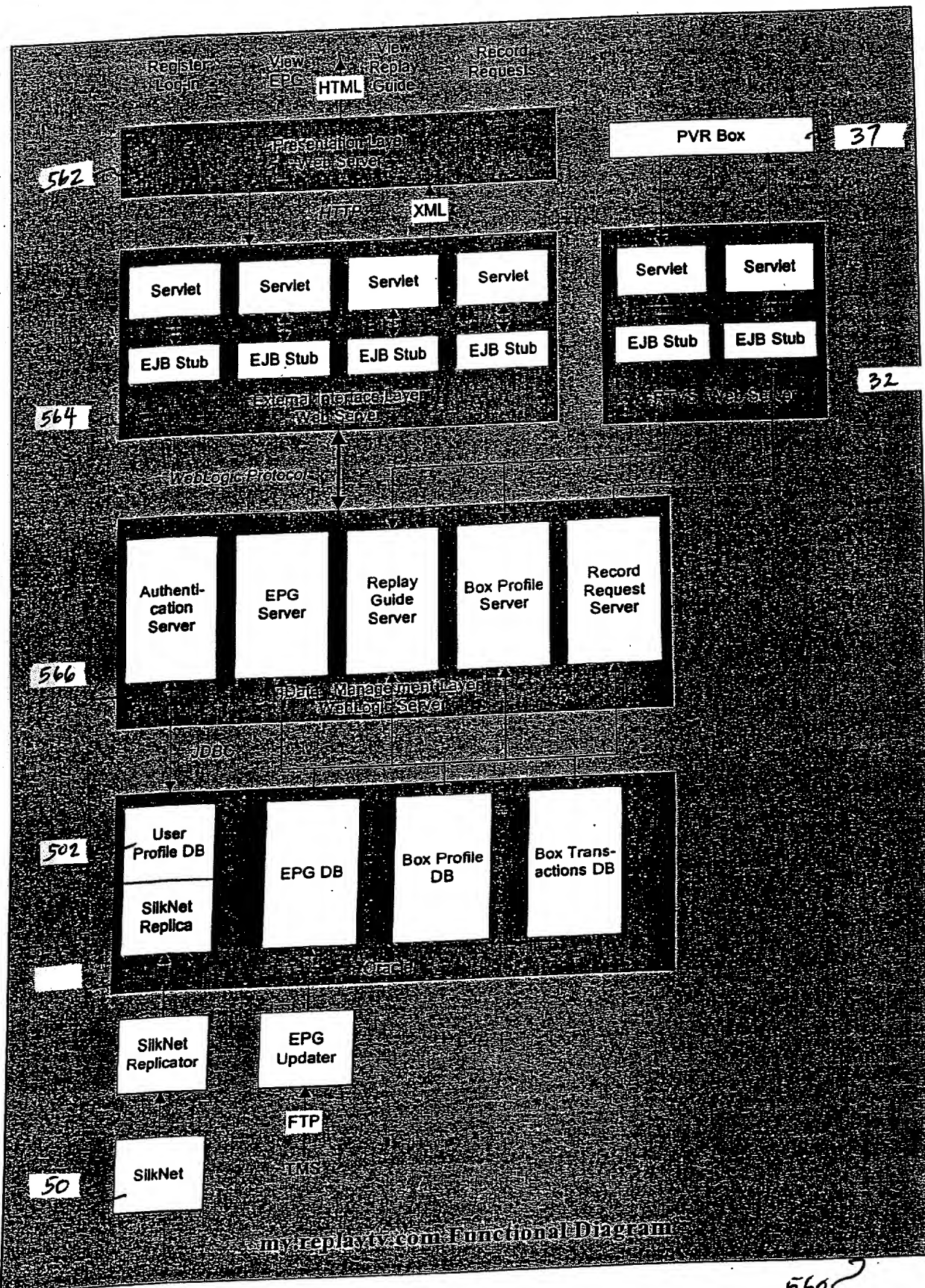


FIG. 30

560

0925424 080304

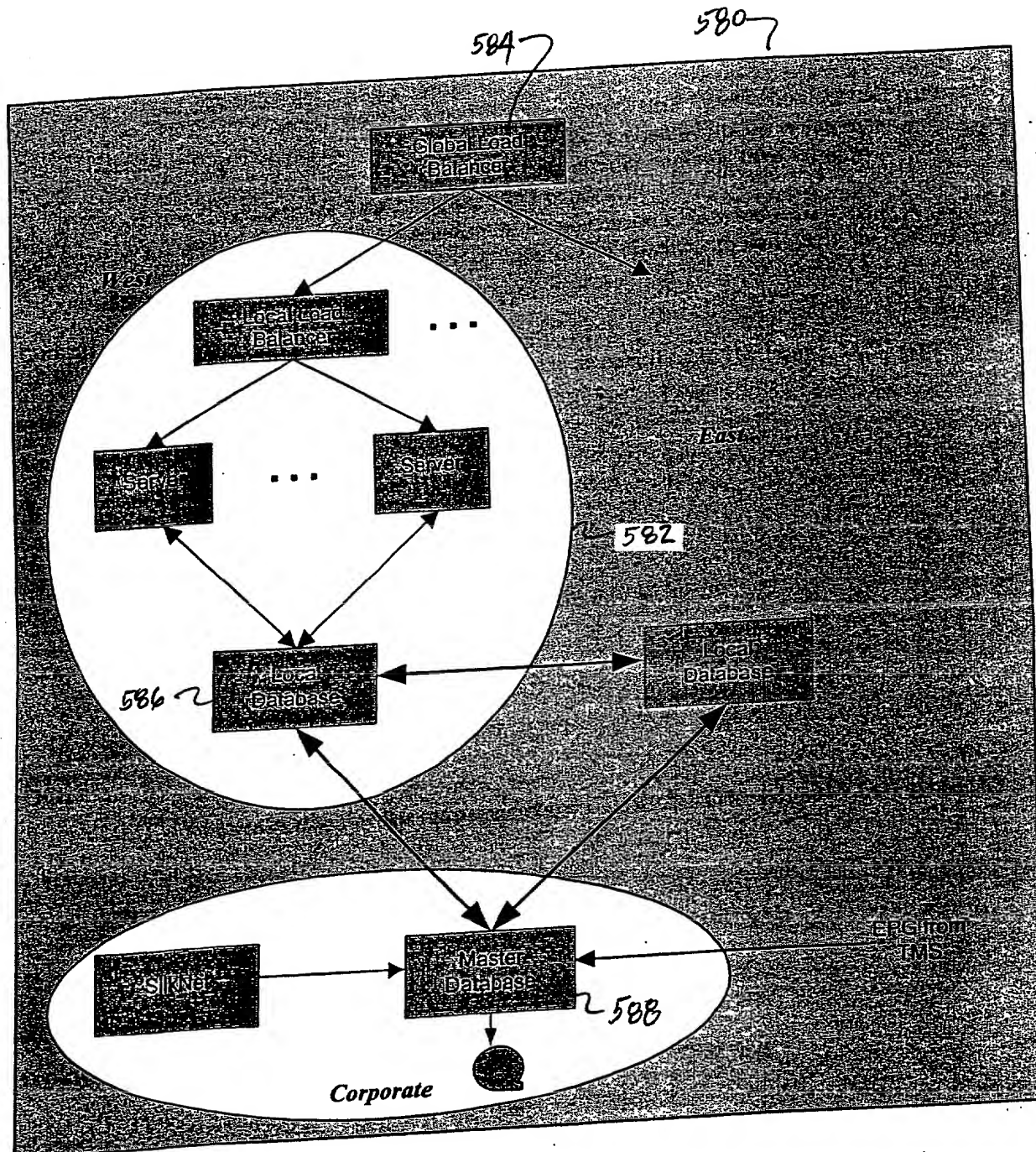


FIG. 31